





## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Atty. Docket: SAKAI17 In re Application of: Conf. No.: Takeshi SAKAI eta l. IA No: PCT/JP2003/007838 Art Unit: IA Filed: June 20, 2003 Examiner: Appln. No.: 10/518,057 V Washington, D.C. Filing Date: June 20, 2003 March 17, 2005 ENZYME FOR DECOMPOSITION ) For: OF SULFATED FUCAN DERIVED ...

## INFORMATION DISCLOSURE STATEMENT [IDS]

Honorable Commissioner for Patents U.S. Patent and Trademark Office Customer Service Window Randolph Building, Mail Stop Amendment 401 Dulany Street Alexandria, VA 22314

Sir:

This Information Disclosure Statement is submitted in accordance with 37 CFR §\$1.97, 1.98, and it is requested that the information set forth in this statement and in the listed documents be considered during the pendency of the above-identified application, and any other application relying on the filing date of the above-identified application or cross-referencing it as a related application.

- [X] 1. This IDS should be considered, in accordance with 37 CFR \$1.97, as it is filed:
- [ ] A. within three months of the filing date of the above-identified national application or within three months of the entry into the national stage of the above-identified international application.
- [X] B. before the mailing date of a first office action on the merits or before the mailing of a first Office action after the filing of a Request for Continued Examination under 37 CFR §1.114; or

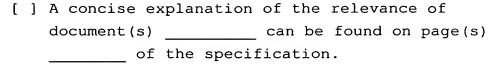
- [ ] C. after (A) and (B) above, but before final rejection or allowance, and Applicant has made the necessary certification (box "i" below) or paid the necessary fee (box "ii" below):
  - [ ] i. Counsel certifies that, upon information and belief, each item of information listed herein either was
    - [ ] (a) first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS; or
    - [ ] (b) not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of undersigned after making reasonable inquiry, not known to any individual designated in 37 CFR \$1.56(c) more than three months prior to the filing of this IDS.
  - [] ii. Credit Card Payment Form, PTO-2038, is attached authorizing payment of the fee set forth in 37 CFR \$1.17(p), presently believed to be \$180. If the enclosed payment is incorrect, please charge any additional fees or credit any overpayment to Deposit Account No. 02-4035 of the undersigned.
- [X] 2. In accordance with 37 CFR §1.98, this IDS includes a list (e.g., form BN/SB/08A/B) of all patents, publications, or other information submitted for consideration by the office, either incorporated into this IDS or as an attachment hereto. Other than U.S. patent(s) and/or published U.S. application(s), which 37 CFR §1.98(a)(2)(ii) does not require to be filed unless specifically required by the Office, a copy of each document listed is attached, except as explained below:
- [ ] A. Document(s) \_\_\_\_\_ is/are deemed substantially cumulative to document(s) , and

in accordance with 37 CFR §1.98(c), a copy of each of the former document(s) is not enclosed.

[ ] B. Certain documents were previously cited by or submitted to the Office in the following prior application(s), which are relied upon under 35 U.S.C. 120:

(insert serial numbers and filing dates of prior applications) Applicant identifies these documents by attaching hereto copies of the forms PTO-892, PTO-1449, PTO/SB/08a and/or PTO/SB/08b (or their BN form equivalents) from the files of the prior application(s) or a fresh BN/SB/08A and/or BN/SB/08B listing these documents, and request that they be considered and made of record in accordance with 37 CFR \$1.98(d). Per 37 CFR \$1.98(d), copies of these documents need not be filed in this application.

- [X] 3. Documents  $\underline{AH-AK}$  and  $\underline{AN}$  are not in the English language. In accordance with 37 CFR §1.98(a)(3), Applicant states:
  - [X] An English translation of each document AH-AK and AN (or of the pertinent portions thereof), or a copy of an English-language abstract (or claim) is enclosed.
  - [X] For documents AH-AK, a corresponding English-language patent or published application is included on the accompanying Form BN/SB/08A, with a line drawn in the margin connecting the non-English-language document with its corresponding English-language document.
  - [ ] A concise explanation of the relevance of document(s) \_\_\_\_\_ is found in the attached search report (see reply to Comment 68 in the preamble to the final rules; 1135 OG 13 at 20).
  - [ ] A concise explanation of the relevance of document(s) \_\_\_\_\_ is set forth as follows:



- [ ] A concise explanation of the relevance of document(s) can be found on the attached sheet.
- [X] 4. No explanation of relevance is necessary for documents in the English language (see reply to Comments 67 and 68 in the preamble to the final rules; 1135 OG 13 at 20).
- [ ] 5. Other information being provided for the examiner's consideration follows:
- In accordance with 37 CFR §§1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in 37 CFR §1.56(b), or that any cited document listed or attached is (or constitutes) prior art. Unless otherwise indicated, the date of publication indicated for an item is taken from the face of the item and Applicant reserves the right to prove that the date of publication is in fact different.

Respectfully submitted,

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Substitute for form 1449A/PTO				Complete if Known			
				Application Number	10/518,057		
INFO	RMATION D	ISC	CLOSURE	Filing Date	December 16, 2004		
STAT	EMENT BY	AΡ	PLICANT	First Named Inventor	Takeshi SAKAI		
•			,	Group Art Unit			
(use as many sheets as necessary)				Examiner Name			
Sheet	1	of	2	Attorney Docket Number	SAKAI17		

	I	Document Number	Publication D		ENT DOCUMENTS  Name of Patentee or			Pages, Columns, Lines, Whe	
Examiner Initials*	Cite No.1	Number-Kind Code <sup>2 (if known)</sup>	MM-DD-YY			nt of Cited Document		Relevant Passages or Relevant Figures Appear	
	AA	US- 6,207,652 B1	03-27-2001		Sakai et al.			•	
	AB	US- 6,277,616 B1	08-21-2001		Sakai et al.		_		
	AC	US- 6,379,947 B2	04-20-2002	Sakai et al.					
<b>├</b>	AD	US- 6,489,155 B1	12-03-2002		Takayama	et al.			
<b>├</b>	AE	US- 2003/0176395 A1	09-18-2003		Sakai et al.				
<b>├</b>	AF	US- 2003/0186389 A1	10-02-2003		Sakai et al.				
	AG	US- 6,720,419 B2	2 04-13-2004		Sakai et al.				
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	Foreign Patent Number					7011121110			
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Examiner Initials*		Foreign Patent Nu Country Code <sup>3</sup> Number <sup>4</sup> Kin known)			ication Date	Name of Patentee Applicant of Cited Docu		Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
	No.1	Country Code <sup>3</sup> Number <sup>4</sup> Kin		MM	ication Date	Name of Patentee	iment	Where Relevant Passages	_
	No.1	Country Code <sup>3</sup> Number <sup>4</sup> Kin known)		MN 07-	ication Date	Name of Patentee Applicant of Cited Docu	iment	Where Relevant Passages	ABS
	No.1 AH	Country Code <sup>3</sup> Number <sup>4</sup> Kin known) WO 97/26896 A1		07-3	ication Date I-DD-YYYY	Name of Patentee Applicant of Cited Docu Takara Shuzo Co. Ltd	ment	Where Relevant Passages	ABS
	No. <sup>1</sup> AH AI AJ	Country Code <sup>3</sup> Number <sup>4</sup> Kin known) WO 97/26896 A1 WO 99/11797 A1		07-3 03-	ication Date I-DD-YYYY 31-1997	Name of Patentee Applicant of Cited Docu Takara Shuzo Co. Ltd Takara Shuzo Co. Ltd	ment	Where Relevant Passages	ABS
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<sup>\*</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 

Applicant's unique citation designation number (optional). 

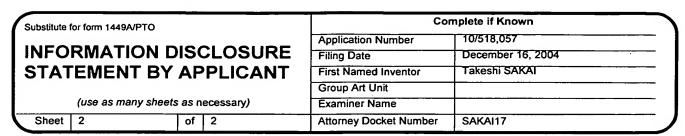
See Kind Codes of USPTO Patent Documents at <a href="www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. 

Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 

For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 

Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 

Applicant is to place a check mark here if English language Translation is attached.



		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	r Cite No.1	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
	AM	PEREIRA M.S. et al., "Structure and Anticoagulant Activity of Sulfated Fucans", The Journal of Biological Chemistry, (3/1999), Vol. 274, No. 12, pp.7656-7667.	
	AN	SAKAI T. et al., "Marine-bacterial endo-@-L-fucan from sea cucumber", The Japanese Society of Carbohydrate Research Nenkai Yoshishu, PII-55, (2002), pp. 136.	ABS
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Examir Signatu		Date Considered	

<sup>\*</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.